

# 8<sup>th</sup> End-of-Year Conference of Swiss Economists Abroad

December 20, 2013  
University of St. Gallen

Organizers: Sandro Ambuehl, Patrick Arni, Lorenz Küng

Local Organizer: Mark Schelker

Supported by the Swiss National Bank and the Swiss Society of Economics and Statistics

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8th End-of-Year Conference of Swiss Economists Abroad

Day Schedule: Friday, December 20

<b>9:00 - 9:30</b>	<b>Arrival, Registration, Coffee</b> (Room 01 - 114)
<b>9:30 - 9:45</b>	<b>Welcome Session and A Word from our Partner, the SNB</b> (Room 01 - 012)
<b>9:45 - 11:05</b>	<b>Parallel Sessions 1 and 2</b> <hr/> <ol style="list-style-type: none"><li>1. Health Economics (Room 01-114)</li><li>2. Financial Macroeconomics (Room 07-002)</li></ol>
<b>11:05 - 11:30</b>	<b>Break</b> (Room 01 - 114)
<b>11:30 - 12:30</b>	<b>Parallel Sessions 3 and 4</b> <hr/> <ol style="list-style-type: none"><li>3. Labor and Behavioral Economics (Room 01-114)</li><li>4. Finance (Room 07-002)</li></ol>
<b>12:30 - 13:50</b>	<b>Lunch</b> (Mensa)
<b>13:50 - 14:00</b>	<b>A Word from our Partner, the SESS</b> (Room 01 - 012)
<b>14:00 - 15:00</b>	<b>Keynote Address by Stefan Meier, Columbia Business School</b> <i>Behavioral Personal Finance</i> (Room 01 - 012)
<b>15:00 - 15:15</b>	<b>Break</b> (Room 01 - 114)
<b>15:15 - 16:15</b>	<b>Parallel Sessions 5 and 6</b> <hr/> <ol style="list-style-type: none"><li>5. Public and Political Economics (Room 01-114)</li><li>6. Macroeconomics (Room 07-002)</li></ol>
<b>16:15 - 16:45</b>	<b>Break</b> (Room 01 - 114)
<b>16:45 - 17:45</b>	<b>Parallel Sessions 7 and 8</b> <hr/> <ol style="list-style-type: none"><li>7. Environmental Economics (Room 01-114)</li><li>8. Industrial Organization (Room 07-002)</li></ol>
<b>17:45 - 19:00</b>	<b>Apéro</b> (Foyer, building 01)
<b>19:00 - 21:00</b>	<b>Dinner</b> (Restaurant Lagerhaus)

8<sup>th</sup> End-of-Year Conference of Swiss Economists Abroad

## Thursday, December 20

**19:00 - 21:00**      **Informal Dinner** (Restaurant Schwarzer Adler)

## Friday, December 21

8:45 - 9:15      Arrival, Registration, Coffee (Room 01 - 114)

9:15 – 9:45      Welcome Session (Room 01 - 012)

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**9:45 - 11:05**      **Session 1: Health Economics** (Room 01-114)

Lorenz Kueng	USSR Babies: Who Drinks Vodka in Russia?
Aline Bütikofer	Missing Work is a Pain: The Effect of Vioxx on Sickness Absence
Berit Gerritzen	Intra-Household Bargaining Power in the Context of HIV Prevention: An Application to Married Couples in Rural Malawi
Rudolf Blankart	How to measure hospital quality unbiased - an econometric approach

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**9:45 - 11:05**      **Session 2: Financial Macroeconomics** (Room 07-002)

Andreas Fuster	Payment Size, Negative Equity, and Mortgage Default
Ilaria Piatti	Heterogeneous Beliefs on Rare Event Risk in the Lucas Orchard
Marcel Rindisbacher	Asset pricing with regime-dependent preferences and learning
Pierlauro Lopez	The Term Structure of the Welfare Cost of Uncertainty

**11:05 - 11:30**      **Break** (Room 01-114)

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**11:30 - 12:30**      **Session 3: Labor and Behavioral Economics** (Room 01-114)

Patrick Arni	Are Social Networks an Effective Job Search Channel? First Results from a Randomized Experiment
Sandro Ambuehl	Belief Updating and the Demand for Information: An Experiment
David Dorn	Untangling Trade and Technology: Evidence from Local Labor Markets

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**11:30 - 12:30**      **Session 4: Finance** (Room 07-002)

David Ardia	The peer performance of hedge funds
Luzi Hail	Dividend Payouts and Information Shocks
Danielle Zanzalari	The Increase in Systematic and Systemic Risk as a Result of the TARP Capital Purchase Program

<b>12:30 - 13:50</b>	<b>Lunch</b> (Mensa)
<b>13:50 - 14:00</b>	<b>A word from our partner, the SESS</b> (Room 01 - 012)
<b>14:00 - 15:00</b>	<b>Keynote Address by Stephan Meier, Columbia Business School</b> <b><i>Behavioral Personal Finance</i></b> (Room 01 - 012)
<b>15:00 - 15:15</b>	<b>Break</b> (Room 01-114)
<b>15:15 - 16:15</b>	<b>Session 5: Public and Political Economics</b> (Room 01-114)
Dina Pomeranz	Tax Me if You Can: Evidence on Firm Misreporting Behavior and Evasion Substitution
Patricia Funk	How accurate are surveyed preferences for public policies? Evidence from a unique institutional setup
Stephan Litschig	Policy Choices in Assembly vs. Representative Democracies: Evidence from Swiss Communes
<b>15:15 - 16:15</b>	<b>Session 6: Macroeconomics</b> (Room 07-002)
Timo Boppart	Non-homothetic preferences and industry directed technical change
Enrico Berkes	Quarterly GDP Series for African Countries: A New Dataset
Charles B. Blankart	Europe and Asia. Erik Jones' European Miracle revisited
<b>16:15 - 16:45</b>	<b>Break</b> (Room 01-114)
<b>16:45 - 17:45</b>	<b>Session 7: Environmental Economics</b> (Room 01-114)
Florian Landis	Distribution of Climate-Policy Cost in Self-Enforcing Policy Schemes: the Equivalence of In-Kind Matching and Lindahl Subsidies
Lucija Muehlenbachs	The Housing Market Impacts of Shale Gas Development
Stefan Staubli	The Effect of Hydraulic Fracturing Truck Traffic on Vehicle Crashes
<b>16:45 - 17:45</b>	<b>Session 8: Industrial Organization</b> (Room 07-002)
Morten Sæthre	Retailer sales incentives: Evidence from the Norwegian pharmaceutical market
Oliver Schenker	Climate Policy and Vertical Specialization in Multi-Stage Production Processes.
<b>17:45 - 19:00</b>	<b>Apéro</b> (Foyer, building 01)
<b>19:00 - 21:30</b>	<b>Dinner</b> (Restaurant Lagerhaus)

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## Abstracts

[20 minutes per paper, including discussion. The last person in a session is timekeeper.]

**09:45 – 11:05 Session 1: Health Economics**

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*Lorenz Kueng (Northwestern University) and Evgeny Yakovlev (New Economic School)*

### **USSR Babies: Who Drinks Vodka in Russia?**

By analyzing individual-level data on the alcohol consumption of Russian males, this paper finds evidence for a longstanding persistence of habits towards certain type of habit-forming goods. Males who grew up in the USSR are accustomed to vodka – the most popular liquor during the Soviet era – whereas those who entered their twenties in the post-Soviet period after the beer industry expanded prefer beer. This finding emphasizes the importance of policy towards young people when they form their habits. The second finding of this paper is that habits and substitution effects outweigh "stepping stone" effects, both in the short and long run. Policy simulation shows that a 50% subsidy on beer and 30% tax on vodka will decrease male mortality from 1.41% to 0.95% in 10 years, cutting in half the gap between Russian and western-European mortality rates.

*Aline Bütikofer (Norwegian School of Economics) and Meghan Skira (University of Georgia, Athens)*

### **Missing Work is a Pain: The Effect of Vioxx on Sickness Absence**

Little is known about medical progress and illness-related work absence. This paper aims to estimate the economic impact of progress in the treatment against chronic pain. In particular, we exploit the market entry of Vioxx and its sudden market withdrawal to analyze whether its availability affected sickness absence and the labor force attachment of individuals suffering from chronic joint pain. Whereas the market entry decreased the number of days individuals were on sickness absence by 13 percent, the market withdrawal led to a 16 percent increase in the number of days individuals were on long-term sickness benefits.

*Berit Gerritzen (Harvard Kennedy School)*

### **Intra-Household Bargaining Power in the Context of HIV Prevention: An Application to Married Couples in Rural Malawi**

Gender inequality has been identified by UNAIDS as a key driver of the HIV epidemic. In Sub-Saharan Africa, where two-thirds of all HIV-infected people live, young women are up to eight times more likely than men to be infected. Contrary to many Western countries, most HIV infections in Sub-Saharan Africa occur during heterosexual intercourse between persons in couple relationships. Using panel data from the Malawi Diffusion and Ideational Change Project MDICP from 2004-2008, this research analyzes the importance of intra-household bargaining power in the context of HIV prevention, i.e., condom use within marriage and HIV-related spousal communication. Data on spouses as well as junior wives (in the case of polygamous marriages) has been matched, which enables for a simultaneous assessment of changes in intra-household bargaining power of both partners. Bargaining power is measured from a systemic and multidimensional perspective, taking into account economic situation, status inside the relationship and in the society in general. The panel dimension of the data allows me to capture unobserved heterogeneity and time trends by using individual-specific fixed effects and region-specific time dummies. Past (potentially risky sexual) behavior is meant to be captured by controlling for the HIV status of both partners.



*Rudolf Blankart, Tom Stargardt, and Jonas Schreyölg (all at University of Hamburg)*

## **How to measure hospital quality unbiased - an econometric approach**

**Background:** Information of treatment quality is unevenly distributed between providers, health insurance and patients. There have been several attempts to reduce this information asymmetry using hospital quality indices. However, the majority of existing indices are indication specific. While indication specific indices are useful for patients, sickness funds are in need of unbiased aggregated hospital quality indices to efficiently commission inpatient services. This study suggests a variance weighted aggregation of different quality outcomes of several indications.

**Methods:** For analysis, we obtained access to patient level data from Barmer-GEK, a large German sickness fund with almost nine million enrolled individuals. We extracted data for the years 2006 to 2012 and included all enrollees that received first treatment with one of the following interventions: (i) bypass surgery, (ii) implantation of a pacemaker, (iii) surgery after ST elevation myocardial infarction (STEMI), or (iv) surgery after non-ST elevation myocardial infarction (NSTEMI). We included hospitals only if they performed at least 100 interventions per category. We used a two stage model to aggregate the mortality and readmission outcomes of different interventions into an index. First, we employed an accelerated failure time model with a lognormal distribution and simultaneously estimated risk-adjusted mortality and readmission for the four interventions. Dummy variables were used to identify the intervention-specific quality performance of each hospital. To adjust for comorbidities, we relied on Elixhauser groups for bypass surgery and implantation of a pacemaker, while using the Ontario acute myocardial infarction mortality prediction rules in case of myocardial infarction. Second, we aggregated intervention-specific quality performance of each hospital to a joint quality indicator using weighted least squares regression. Weights were based on the precision of the intervention-specific quality performance measure. To do so, we multiplied the inverse of the variance of the error term of the four-equation system to account for precision with the volume of interventions at each hospital to account for the specialization. At last, we normalized the aggregated indicators to obtain an index between 0 and 1. Results After refinement of the dataset, we identified 20.916 patients that obtained bypass surgery, 19.506 patients that obtained a pacemaker, 7.268 patients that obtained surgery after STEMI and 2.853 that obtained surgery after NSTEMI. In total, 144 hospitals fulfilled the criteria and have been ranked according to their quality performance.

**Discussion/Conclusion:** With this study, we provide a method to calculate a quality index that is able to aggregate performance in different interventions while accounting for hospital specialization using administrative data. Thus, our index has the potential to be expanded to a broader range of interventions even from different specialties. As quality and quality control is of increasing importance, the method proposed may help to improve the overall quality in health care systems by providing a benchmark. It may also contribute to identifying important drivers of hospital quality.

## **09:45 – 11:05 Session 2: Financial Macroeconomics**

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*Andreas Fuster (Federal Reserve Bank of New York) and Paul Wille (Federal Reserve Bank of Boston)*

### **Payment Size, Negative Equity, and Mortgage Default**

Surprisingly little is known about the importance of mortgage payment size for default, as efforts to measure the treatment effect of rate increases or loan modifications are confounded by borrower selection. We study a sample of hybrid adjustable-rate mortgages that have experienced large rate reductions over the past years and are largely immune to these selection concerns. We show that interest rate reductions dramatically affect repayment behavior, even for borrowers who are significantly underwater on their mortgages. Our estimates imply that cutting a borrower's payment in half reduces his hazard of becoming delinquent by about 55 percent, an effect approximately equivalent to lowering the borrower's combined loan-to-value ratio from 145 to 95 (holding the payment fixed). These findings shed light on the driving forces behind default behavior and have important implications for public policy.

*Ilaria Piatti (University of Lugano)*

### **Heterogeneous Beliefs on Rare Event Risk in the Lucas Orchard**

This paper studies the asset pricing implications of disagreement about the probability of a systematic disaster. The starting point is a general equilibrium Lucas endowment economy with multiple trees and heterogeneous beliefs on systematic rare event risk and the goal is to understand how fear and risk sharing mechanisms affect the equity and variance risk premia and the relation between them, both at an aggregate level and in the cross-section of stock returns. First, I find a time-varying link between equity and variance premia, which is systematically related to the cross-sectional distribution of agents' consumption. Second, the risk neutral stock return correlation increases with the consumption share of the pessimist, while the physical correlation is relatively flat, leading to a countercyclical

correlation risk premium. Third, as the number of assets increases, the aggregate variance premium is almost entirely driven by fear of systematic disasters. Empirically, I find that, consistent with model simulations, the predictive power of the variance premium for future excess returns is stronger in phases of financial distress, characterized by a larger disagreement between investors, and for small stocks, whose returns are more dependent on the compensation for systematic rare event risk.

*Marcel Rindisbacher (Boston University, School of Management), Tony Berrada (University of Geneva), and Jerome Detemple (Boston University)*

### **Asset pricing with regime-dependent preferences and learning**

This paper studies equilibrium in a pure exchange economy with unobservable Markov switching consumption growth regimes and regime-dependent preferences. Variations in risk attitudes have fundamental effects on the structure of equilibrium. Explicit solutions are provided for the market price of risk, the interest rate, stock and bond prices, and asset return volatilities. Calibration shows that this one-factor model can simultaneously support empirical long run values of the market price of risk, the interest rate, the stock market volatility, the equity premium and the moments of the consumption growth rate. Dynamic properties of the model are examined. An implied recession index is constructed and its performance evaluated. The ability to explain the dividend strips puzzle, the term structure of interest rates and the predictive behavior of the term premium are studied.

*Pierlauro Lopez (Banque de France)*

### **The Term Structure of the Welfare Cost of Uncertainty**

The marginal cost of consumption fluctuations has a term structure that is a simple transformation of the term structures of equity and interest rates. I use recent evidence extracted from index option markets to infer a downward-sloping and volatile term structure of welfare costs. On average, cashflow stability is a macroeconomic priority and short-run stability is a greater priority than long-run stability. I estimate that at the margin the elimination of one-year ahead cashflow volatility is worth around 10 percentage points of additional growth. This number compares to a marginal cost of all consumption fluctuations of about 2 percentage points. Over time, the term structure of welfare costs varies substantially. Return predictors reveal the states that drive the term structure of welfare costs and thereby signal its current position and future developments. Finally, the link between welfare costs and risk premia can make the case for risk premia targeting as a welfare-enhancing policy regime.

## **11:30 - 12:30 Session 3: Labor and Behavioral Economics**

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*Patrick Arni (IZA Bonn), Giuliano Bonoli, Rafael Lalive, Daniel Oesch, Anna von Ow, Pierpaolo Parrotta, and Nicolas Turtschi (all University of Lausanne)*

### **Are Social Networks an Effective Job Search Channel? First Results from a Randomized Experiment**

This project assesses the relevance of social networks as a job search channel. Earlier survey evidence suggests that job search networks are important since many employed individuals found their current job via a lead from their friends or former colleagues. We exposed a cohort of newly unemployed individuals in a large region of Switzerland to an information treatment. Within the initial information session, run by the public employment service agencies, we first asked the individuals to complete a detailed baseline survey covering their family and friend networks. Subsequently, about 50 % of all job seekers were also exposed to a specific information and activation module – which was assigned in a quasi-random fashion – covering the importance of job search via social networks. Preliminary analyses are (recently) based on an observation window from February 2012 to March 2013. We do not find evidence that information on networks helped job seekers de-register more quickly. However, information on the importance of job search networks appears to have helped women locate more jobs rather than de-registering for other reasons. No corresponding effect is found for men. We explore potential channels of explanation for this gender-specific behavioral reaction.

*Sandro Ambuehl (Stanford) and Shengwu Li (Stanford)*

## **Belief Updating and the Demand for Information**

How do individuals value noisy information that guides economic decisions, and how does this relate to belief updating? Such interactions are all but inescapable in most economic contexts, but empirical evidence is scarce. Our experiment uses modifications of familiar updating tasks to measure both individuals' valuation of information, and the change in beliefs that such information causes. Our design enables us to fully explore preferences over the space of information structures in a two-states two-signals setting. We test for key behavioral patterns in willingness-to-pay for information, and relate this to belief updating. The aggregate data are not far from the predictions of the standard model, but this masks substantial individual heterogeneity. Subjects differ consistently in their responsiveness to information – the extent that their beliefs move upon observing signals. This underlying property links individuals' behavior across different choice problems: more responsive subjects value information more highly, and are quicker to attain extreme beliefs in a qualitatively distinct choice setting.

*David Dorn (CEMFI), David Autor (MIT), and Gordon Hanson (UCSD)*

## **Untangling Trade and Technology: Evidence from Local Labor Markets**

We juxtapose the effects of trade and technology on employment in U.S. local labor markets between 1980 and 2007. Labor markets whose initial industry composition exposes them to rising Chinese import competition experience significant falls in employment, particularly in manufacturing and among non-college workers. Labor markets susceptible to computerization due to specialization in routine task-intensive activities instead experience occupational polarization within manufacturing and nonmanufacturing but no net employment decline. Trade impacts rise in the 2000s as imports accelerate, while the effect of technology appears to shift from automation of production activities in manufacturing towards computerization of information-processing tasks in nonmanufacturing.

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### **11:30 - 12:30 Session 4: Finance**

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*David Ardia (Laval University) and Kris Boudt (Vrije Universiteit Brussel)*

## **The peer performance of hedge funds**

An essential component in the analysis of (hedge) fund returns is to measure its performance with respect to the group of peer funds. Through the analysis of risk-adjusted return percentiles an answer is given to the question how many funds are out-performed by the focal fund. In case all funds perform equally well, this approach will lead a random number between zero and one, depending on how lucky the fund is. We use the false discovery rate approach to construct relative performance ratios that account for the uncertainty in estimating the performance differential of two funds. Our application is on hedge funds, which leads us to develop a test for equality of the modified Sharpe ratio of two funds. The effectiveness of the method is illustrated with a Monte Carlo study and an empirical study is performed on the Hedge Fund Research database.

*Luzi Hail (University of Pennsylvania), Ahmed Tahoun (London Business School), and Clare Wang (Northwestern University)*

## **Dividend Payouts and Information Shocks**

We examine changes in firms' dividend payouts following an exogenous shock to the information asymmetry problem between managers and investors. Agency theories predict a decrease in dividend payments to the extent that improved public information lowers managers' need to convey their commitment to avoid overinvestment via costly dividend payouts. Conversely, dividends could increase if minority investors are in a better position to extract cash dividends. We test these predictions by analyzing the dividend payment behavior of a global sample of firms around the mandatory adoption of IFRS and the initial enforcement of new insider trading laws. Both events serve as proxies for a general improvement of the information environment and hence, the corporate governance structure in the economy. We find that following the two events firms are less likely to pay

(increase) dividends, but more likely to cut (stop) such payments. The changes occur around the time of the informational shock, and only in countries and for firms subject to the regulatory change. They are more pronounced when the inherent agency issues or the informational shocks are stronger. We further find that the information content of dividends decreases after the events. The results highlight the importance of the agency costs of free cash flows (and changes therein) for shaping firms' payout policies.

*Danielle Zanzalari (Clemson University)*

## **The Increase in Systematic and Systemic Risk as a Result of the TARP Capital Purchase Program**

This paper investigates the stock market response to the four key TARP events for 201 banks that participates in the Capital Purchase Program. My analysis reveals that banks experienced over a 16% return to the October 14 TARP announcement with smaller returns for other events. Idiosyncratic risk falls slightly after TARP events, which indicates that banks decreased their individual bank risk. However, post-TARP event systematic and systemic risk levels increased compared to pre-event levels, which indicates that TARP has a significant impact on the riskiness of not only the financial industry, but the marketplace as a whole.

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### **15:15 - 16:15 Session 5: Public and Political Economics**

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*Dina Pomeranz (Harvard), Paul Carillo (George Washington University), and Monica Singhal (Harvard)*

## **Tax Me if You Can: Evidence on Firm Misreporting Behavior and Evasion Substitution**

A recent literature has argued that the ability of the tax authority to verify and crosscheck taxpayer-provided information is crucial to reducing evasion and building fiscal capacity. However, the effectiveness of such policies may be limited if taxpayers can evade along multiple margins with differing degrees of verifiability. We examine these questions by exploiting a recent policy experiment in Ecuador. In 2011, selected firms were notified by the tax authority that there were discrepancies between their declared revenues on previously filed corporate income tax returns and revenues estimated from third party information. Subsequently, firms revised their returns to increase declared revenues but also increased costs by almost the same amount, resulting in only minor increases in total tax collection. These findings cannot be explained by standard tax evasion models and raise a series of important questions both for tax theory and policy.

*Patricia Funk (Universitat Pompeu Fabra)*

## **How accurate are surveyed preferences for public policies? Evidence from a unique institutional setup**

Opinion polls are widely used to capture public sentiments on a variety of issues. If citizens are unwilling to reveal certain policy preferences to others, opinion polls may fail to characterize population preferences accurately. The innovation of this paper is to use unique data to measure biases in opinion polls for a broad range of policies. I combine data on 184 referenda held in Switzerland between 1987 and 2007, with post-ballot surveys that ask for each proposal how the citizens voted. The difference between stated preferences in the survey and revealed preferences at the ballot box provides a direct measure of bias in opinion polls. I find that these biases vary by policy areas, with the largest ones occurring in policies on immigration, international integration, and votes involving liberal/conservative attitudes. Also, citizens show a tendency to respond in accordance to the majority.

*Stephan Litschig (Universitat Pompeu Fabra) and Patricia Funk (Universitat Pompeu Fabra)*

## **Policy Choices in Assembly vs. Representative Democracies: Evidence from Swiss Communes**

This paper evaluates whether the form of the legislative institution—citizen assembly vs. elected parliament—affects the allocation of community resources. We collect data at the local (commune) level in Switzerland over the period 1945-2010 and use two research designs—fixed effects and regression discontinuity (RD) based on local population—to get at the causal effect of the form of democracy on the size and structure of local public spending. Preliminary fixed-effects estimates suggest that parliaments increase both revenue and public expenditure per capita by about 8 percent. In contrast, regression discontinuity estimates are essentially zero and estimated precisely enough to reject the impact on expenditure per capita found in other settings. Results so far thus highlight the local nature of RD estimates (population is an order of magnitude larger in our fixed effects sample compared to the RD sample) as well as the importance of contextual factors—such as the existence of fiscal referenda, present in Switzerland but likely absent elsewhere—in mediating the effect of legislative institutions on policy choices.

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## **15:15 - 16:15 Session 6: Macroeconomics**

*Timo Boppart (IIES, Stockholm University) and Franziska Weiss (University of Zurich)*

## **Non-homothetic preferences and industry directed technical change**

Sectoral data features (i) changing relative expenditures of different sectors, (ii) non-constancy in relative prices and (iii) long-run trends in relative TFP growth rates across sectors. We provide a tractable theory of industry directed technical change, which is able to reconcile these findings. In doing so, this paper emphasizes the importance of directed technical change, nonhomotheticity of preferences and structural change as a long-run phenomenon. Using the input-output tables of the U.S., our theory helps us to reconstruct how structural change in terms of final consumption affects the market size of industry value-added. Arguing that the structural change across broad categories of final consumption is exogenous from the perspective of an individual firm, this gives us an instrument for the industrial market size (at the value-added level). We then empirically test for the market size effect of induced innovation. Our findings suggest that a 1 percent increase in an industry's market size (relative to GDP) leads to an increase in the TFP growth rate of about 0.3 percentage points over five years.

*Enrico Berkes (Northwestern University) and Rafael Portillo (IMF)*

## **Quarterly GDP Series for African Countries: A New Dataset**

Data availability is one of the biggest challenges of empirical analysis in Macroeconomics. The problem is particularly severe when considering low income countries. We build a unique dataset of quarterly GDP series for 36 African countries. We follow the methodology proposed by Proietti and Moauro (2006) who apply non-linear Kalman filter and smoother techniques to interpolate low frequency series using high frequency indicators. Our approach is specifically tailored to take into account problems typical of data collected in low income countries, such as missing observations and unbalanced panels. We also extend the procedure to allow for structural breaks and outliers in the indicator series identified by proper tests. This approach gives us three results. First, it interpolates the GDP data. Second, it estimates a coincident indicator of economic activity. Third, it delivers nowcasts of the GDP series by using current values of high frequency indicators.

*Charles B. Blankart (Humboldt University and University of Lucerne)*

## **Europe and Asia. Erik Jones' European Miracle revisited**

Why is Europe so rich and continental Asia (still) so poor? Eric Jones (1981, 2001) argues in his famous book "The European Miracle" that the lead of Europe over Asia is deeply rooted in the economic history of the two continents. Asia has remained autocratic, and Europe has become competitive. But why has Europe become a competitive multistate system whereas Asia adopted

monocratic regimes? An answer to this fundamental question is still missing. Jones wants to explain history sequentially, but then gets lost in an infinite regress. Should Jones' work therefore be refuted? The answer is no. For Jones' rich historical material can serve as a data set for testing an overarching theory explaining Europe's lead over Asia's lag as a whole. We claim that such a theory can be formulated based on homo oeconomicus and land (two truly exogenous variables) and that this theory can explain not only Jones' observations but in addition some events which Jones has left out. We do not say that another more sophisticated theory could not do better. We only want to demonstrate that it is possible to explain "The Economic Miracle" within the conventional economic approach of preferences and constraints and so to bring Jones back to economics.

## 16:45 - 17:45 Session 7: Environmental Economics

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*Florian Landis (ZEW)*

### **Distribution of Climate-Policy Cost in Self-Enforcing Policy Schemes: the Equivalence of In-Kind Matching and Lindahl Subsidies**

Two somewhat different self-enforcing frameworks for reaching efficient levels of public good provision have been proposed and discussed in the literature since the late 1970s. Their main merit so far has been seen in featuring Pareto optima as sub-game perfect Nash equilibria without requiring a social planner, and only minimal or no institutions. But negotiations about global climate policy are not only held in absence of strong global institutions, but, apparently, different perceptions about fair distribution of abatement cost seem to be preventing the reaching of an agreement to a similar degree. Under this light, I analyze how the outcome under the two frameworks distribute abatement cost among agents. As a theoretical result, I obtain that the two frameworks distribute cost identically, and as an empirical result I show which regions of the world, according to the RICE model, would prefer these self-enforcing frameworks over a globally uniform carbon price.

*Lucija Muehlenbachs (Resources for the Future), Elisheba Spiller (Environmental Defense Fund), and Christopher Timmins (Duke University)*

### **The Housing Market Impacts of Shale Gas Development**

The extraction of natural gas from shale has increased rapidly over the past decade, with measurable impacts on the economy and the environment. Using data from Pennsylvania and New York and an array of empirical techniques to control for confounding factors, we recover hedonic estimates of property value impacts that vary with geographic scale and water source. Results indicate negative impacts of shale gas development on nearby groundwater-dependent homes, while piped-water homes are positively impacted by close proximity (suggesting an impact of lease payments). At a broader geographic scale, we find evidence of a boom-bust cycle due to shale gas development.

*Stefan Staubli (RAND Corporation) and Lucija Muehlenbachs (Resources for the Future)*

### **The Effect of Hydraulic Fracturing Truck Traffic on Vehicle Crashes**

Natural gas extraction from shale formations has grown rapidly, largely thanks to developments in hydraulic fracturing and horizontal drilling. Hydraulic fracturing requires vast quantities of water to be brought to and removed from the shale gas well. Most fluid is transported via tanker trucks, requiring around 1,300 truck trips per well. In this paper, we examine the causal effect of shale gas development on truck traffic and on traffic accidents. We combine data on 2 million traffic accidents in Pennsylvania and quasi-experimental variation in traffic due to the location of shale gas wells and the origin and destination of the water trucks. In a first step, we exploit the spatial and temporal variation in the location of shale gas wells to estimate the exogenous variation in truck traffic due to shale extraction. In a second step, we estimate the frequency of accidents on the predicted truck traffic attributed to shale gas in the location the accident occurred. We find that one additional well drilled per

month raises the frequency of accidents involving a heavy truck by 2 percent and the frequency of accidents involving a fatality by 0.6 percent.

## 16:45 - 17:45 Session 8: Industrial Organization

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*Morten Sæthre (Norwegian School of Economics)*

### **Retailer sales incentives: Evidence from the Norwegian pharmaceutical market**

Non-price competition and retailer effort to increase sales is central to conduct in many markets. I show how the endogenous nature of unobserved non-price competition poses a problem for demand estimation. When markets feature this type of conduct, cost shifters will no longer satisfy the exclusion restriction, and the parameters of demand will not be consistently estimated. I propose a simple model to incorporate unobserved supply side non-price effort into empirical market studies. Using the first order condition for optimal effort and optimal pricing, I show how to identify parameters in a random coefficients logit demand specification. Furthermore, I present an application of the framework to the market for prescription drugs in Norway, where I find that controlling for pharmacy chain effort is important for estimates of a consumer drug choice model.

*Oliver Schenker, Simon Koessler, and Andreas Löschel (all ZEW Mannheim)*

### **Climate Policy and Vertical Specialization in Multi-Stage Production Processes.**

In the last decades, actuated by decreasing trade and communication costs, production chains emerged that stretch across many countries. But not much is known how climate policy affect global value chains. This study contributes to close this gap and analyzes a unilateral implementation of CO<sub>2</sub> pricing and a border carbon tax (BCT) with focus on vertical specialization effects. First, a theoretical partial equilibrium model of a two-stage production process and two countries is presented. We found that unilateral reductions force emission-intensive producers to outsource a greater proportion of their supply chain to unregulated countries. BCT in turn is successful in fetching these stages home. However, whereas medium-energy intensive upstream production can be brought home successfully, downstream industries lose competitiveness due to increasing input costs. We examine these findings in a computable general equilibrium model that is calibrated with new data on intermediate trade flows. The findings corroborate the results of the theoretical analysis: A unilateral GHG reduction in the EU leads to less(more) vertical specialisation in sectors with low(high) carbon-intensity. If the reduction policy is complemented with a BCT, vertical specialization decreases in particular in carbon-intensive upstream sectors.

## Venues

### **Conference: University of St. Gallen**

#### **Informal Dinner (December 19): Restaurant Schwarzer Adler**

- Marktplatz 13, 9000 St. Gallen, 071 222 75 07
- <http://www.schwarzeradler.ch>

#### **Conference Dinner (December 20): Restaurant Lagerhaus**

- Davidstrasse 42, 9000 St. Gallen, 071 223 70 07
- <http://www.restaurantlagerhaus.ch>

#### **Accommodation (19/20.12.2013 and 20/21.12.2013)**

Hotel Dom  
Webergasse 22  
9000 St. Gallen  
[www.hoteldom.ch](http://www.hoteldom.ch)

Hotel am Spisertor  
Moosbruggstrasse 1  
9000 St. Gallen  
[www.spisertor.ch](http://www.spisertor.ch)

Hotel Vadian  
Gallusstrasse 36  
9000 St. Gallen  
[www.hotel-vadian.com](http://www.hotel-vadian.com)

Rooms 01-114 and 01-012 are in building 01, room 07-002 is in building 07.

